

REMARKS

Claims 1-5 are all of the claims pending in the application prior to entry of this Amendment. New claims 6-13 are added via this Amendment. No excess claim fees are necessary.

Pursuant to the Examiner's suggestion set forth in paragraph 2 on page 2 of the Office Action, Applicants have adopted the new title of the invention, which is more clearly indicative of the invention to which the claims are directed.

With respect to the drawings, as indicated on page 10, lines 8-12 of the instant specification, the bearing 42 acts as a "positional regulation part" in one embodiment. Consequently, inasmuch as Fig. 1 shows the bearing 42, no changes to the drawings are believed to be necessary.

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Ohi et al. (hereinafter "Ohi") in view of Hirano et al. (hereinafter "Hirano"). This rejection is respectfully traversed.

By this Amendment, claim 1 is amended to define the structure of the stator more particularly, i.e., that the metallic stator cores are stacked in an axial direction, and each stator core has an outer yoke and an inner yoke (see, e.g., cores 11 and 12 in Fig. 1, each having an outer yoke 13 and an inner yoke 14). New claim 6 recites, *inter alia*, at least two metallic stator cores, each with an outer yoke and an inner yoke, and a rotor disposed inside the at least two cores. New claim 11 is a method claim that recites insert molding the stator cores (each having an outer yoke and an inner yoke) integrally with the resin coil bobbin. See the Examiner's comments on page

AMENDMENT UNDER 37 C.F.R. §1.111  
U.S. SERIAL NO. 09/987,086

ART UNIT 2834  
Q67205

4 of the Office Action, wherein he refused to give patentable weight to the "method of manufacturing limitations." According to claim 12, the positional regulation part is provided integrally with the stator cores and bobbin that are integrally insert molded, resulting in improved axial positional accuracy between the stator cores and the rotor magnet which are opposite each other.

As a result of the above-indicated construction, positional accuracy between the at least two stator cores and the rotor is improved and assured. Consequently, as explained in the specification, the rotational torque is improved, and assembling is made easier. Further, the size of the motor can be decreased, and manufacturing costs are reduced.

Regarding apparatus claims 1 and 6, Ohi in combination with Hirano clearly fails to suggest the invention as now more particularly claimed, specifically the at least two metallic stator cores each with an outer yoke and an inner yoke (claims 1 and 6), and the cores being stacked in the axial direction (claim 1), and the rotor being disposed inside the at least two stator cores (claim 6).

Regarding method claim 11, Ohi in combination with Hirano clearly fails to suggest stator cores that are insert molded integrally with the resin coil bobbin. The prior art also fails to teach or suggest a position regulation part integrally molded with the stator cores which, in turn, are insert molded integrally with the resin coil bobbin, as recited in dependent claim 12.

In view of the foregoing amendments and remarks, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephone

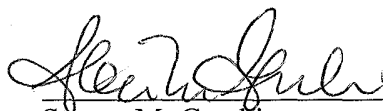
AMENDMENT UNDER 37 C.F.R. §1.111  
U.S. SERIAL NO. 09/987,086

ART UNIT 2834  
Q67205

interview, the Examiner is kindly requested to contact the undersigned attorney at the local telephone number listed below.

Applicants hereby petition for any extension of time that may be required to maintain the pendency of this case, and any required fee (except for the Issue Fee) should be charged to our Deposit Account No. 19-4880.

Respectfully submitted,



Steven M. Gruskin  
Registration No. 36,818

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3213  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

Date: June 14, 2002

AMENDMENT UNDER 37 C.F.R. §1.111  
U.S. SERIAL NO. 09/987,086

ART UNIT 2834  
Q67205

**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE TITLE:**

**The title is changed as follows:**

ROTOR MOTOR WITH A COIL RESIN BOBBIN

**IN THE CLAIMS:**

**The claims are amended as follows:**

1. (*Amended*) A motor comprising:

a stator provided with a resin coil bobbin formed by insert molding having at least two metallic stator cores, said cores being stacked in an axial direction of the motor, and each core having an outer yoke and an inner yoke; and

a rotor accommodated in said stator, said rotor being rotated while being urged by an urging member in the axial direction of said rotor;

wherein a positional regulation part for regulating the position of said rotor in a thrust direction is integrally provided in said coil bobbin.

**New claims 6-13 are added.**